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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/729,007

Applicant(s)

ENOKIDA ET AL.

Examiner

BERNARD KRASNIC

Art Unit

2624

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CS-100)
Paper No(s)/Mail Date 11/29/2007, 4/18/2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. The Examiner believes that the claims regarding the zero-length packets could only get priority back to Foreign Application JAPAN 2003-176930 06/20/2003. The Examiner has not seen any support for the zero-length packets in the other two Foreign Applications JAPAN 2002-356738 12/09/2002 and JAPAN 2003-201162 07/24/2003.

Response to Arguments

2. The amendment filed 9/29/2008 have been entered and made of record.
3. The Applicant has canceled claim(s) 21-25.
4. The Applicant has included newly added claim(s) 26-35.
5. The application has pending claim(s) 26-35.
6. In response to the amendments filed on 9/29/2008:

The "Objections to the title, specification and claims" have been entered and therefore the Examiner withdraws the objections to the title, specification and claims.

The "Claim rejections under 35 U.S.C. 112, second paragraph" have been entered and therefore the Examiner withdraws the rejections under 35 U.S.C. 112, second paragraph.

The "Claim rejections under 35 U.S.C. 101" have been entered and therefore the Examiner withdraws the rejections under 35 U.S.C. 101.

The "Obviousness-Type Double Patenting Rejection on claims 1-13" is withdrawn because the co-pending Application 10/231,206 has been abandoned.

7. The Applicant's arguments with respect to claims 26-35 have been considered but are moot in view of the new ground(s) of rejection because the Applicant has only new claim(s) 26-35.
8. Applicant's arguments filed 9/29/2008 have been fully considered but they are not persuasive.

The Applicant alleges, "Applicants have found nothing in ..." in pages 12-13 through "The other claims in this application ..." in page 14, and states respectively that the Applicant has found nothing in the prior art references Deshpande or Marcellin whether considered either separately or in combination that suggests the claim limitations as recited in the independent claims and therefore the claims are patentable and in condition for allowance. However the Examiner disagrees because the new claims are very much similar as the previous set of claims which have been rejected in the Non-Final Office Action dated 8/17/2007 and therefore still believes the prior art references Deshpande and Marcellin in combination do teach the current new claims in the broadest reasonable claim language interpretation as will be discussed further below in the rejection section. Therefore new claims 26-35 are still not in condition for

allowance because they are still not patentably distinguishable over the prior art references.

Claim Objections

9. Claim 31 is objected to because of the following informalities:

Claim 31 at line 4: "setting the portion" should be -- setting a portion --.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

10. Claim(s) 26-32 is/are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent¹ and recent Federal Circuit decisions² indicate that a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. For example the method steps of generating encoded data in JPEG2000 format are not tied to another statutory category such as a particular

¹ *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

² *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

apparatus (i.e. a computer processor for processing the specific method steps). Any amendment to the claim(s) should be commensurate with its corresponding disclosure.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 28, 30, and 33-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re Claims 28 and 30: The claim limitation "the encoded data" is indefinite because it is unclear which encoded data is being referred to, the first encoded data or the second encoded data or JPEG2000 encoded data.

Re Claim 33: The claim limitation "the JPEG2000" at lines 6-7 lacks clear antecedent basis. It is suggested to be -- a JPEG2000 --.

Re Claim 33: The claim limitation "the server" in lines 7 and 16 lacks clear antecedent basis. It is suggested to be -- the first computer -- and it has been treated as such.

Re Claim 33: The limitation "the storage means" in line 9 lacks clear antecedent basis.

It is suggested to be -- the first storage unit -- and it has been treated as such.

Re Claim 33: The limitation "the calculation step" in line 11 lacks clear antecedent basis.

It is suggested to be -- the calculation unit -- and it has been treated as such.

Re Claim 33: The limitation "the acquisition step" in line 15 lacks clear antecedent basis.

It is suggested to be -- the acquisition unit -- and it has been treated as such.

Re Claim 33: The limitation "the storage means" in lines 21 and 23 respectively lacks clear antecedent basis. It is suggested to be -- the first and second storage units -- and it has been treated as such.

Claim 34 is dependent upon claim 33.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 26-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deshpande ("HTTP streaming of JPEG2000 images" – IEEE – 2001, pages 15-19, as applied in previous Office Action) in view of Marcellin ("JPEG2000: Highly scalable image compression" – IEEE, April 2001, pages 268-272, as applied in previous Office Action).

Re Claim 26: Deshpande discloses an encoded data generation method for generating encoded data in JPEG2000 format / JPEG2000, by a client / client including storage means / computer memory for storing fragmentary first encoded data / lowest resolution version of JPEG2000 encoded data managed by a server / web server (see Fig. 1, abstract, page 16 at Section 2), comprising a calculation step of calculating / finding the appropriate byte-ranges on the index file for the ROI second encoded data / zoom in out on ROI for new resolution version from the JPEG2000 encoded data managed by the server, wherein the second encoded data is designated by a user / user operating client as a portion of the JPEG2000 encoded data and excludes the fragmentary first encoded data / different portions creating different resolution versions stored in the storage means (see Fig. 1, page 16 at Sections 2-3, different portions of the codestream provide different resolutions and this may be done progressively meaning further codestream not provided initially in the low resolution version may be streamed to provide a new higher resolution version); a request step of requesting of the server the second encoded data obtained in the calculation step (see Fig. 1, page 16 at Section 2, request relevant parts); an acquisition step of acquiring / progressive rendering the second encoded data from the server (see Fig. 1, page 16 at Section 2); a storage step of

storing in the storage means / computer memory stores also the new resolution version data the second encoded data obtained by the acquisition step (see Fig. 1, page 16 at Section 2); a segmentation step of segmenting / segmenting or dividing into tiles and precincts and components the JPEG2000 encoded data / JPEG2000 managed by the server into a plurality of independent encoded data segments / independently coded, each segment being a unit of display / each divided tile and precinct and component has its own different resolutions for display (see pages 16-17 at Sections 2-3); a determination step of determining, for each independent encoded data segment, whether all layer encoded data of the plurality of independent encoded data segments are stored in the storage means (see pages 16-17 at Sections 3-4, the index file tells when the segmented data is stored because it is used to record the tile-part and header-part information retrieved progressively); and an output step of outputting the second encoded data, and the fragmentary first encoded data stored in the storage means as encoded data having JPEG2000 format (see abstract, pages 16-17 at Sections 2-3, the progressively transmitted JPEG2000 data is outputted, decoded and then displayed to the client).

However Deshpande fails to explicitly suggest a dummy storage step of storing in the storage means dummy encoded data if the layer encoded data is not stored in the storage means; and an output step of outputting the dummy encoded data.

Marcellin discloses a dummy storage step of storing in the storage means dummy encoded data if the layer encoded data is not stored in the storage means (see page 271 at Section 3.4 at paragraphs 1-5, each tile-part and packet part that form the

independent encoded data are recorded and record the rest as a zero length packets or empty packets); and an output step of outputting the dummy encoded data (see page 271 at Section 3.4 at paragraphs 1-5, page 272 at Section 4 at paragraph 3, progressive JPEG2000 data).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Deshpande's method using Marcellin's teachings by including the zero length packet data or empty packet option of the specified JPEG2000 standard in order to allow the decoder to know if the packet is empty or not (see Marcellin, page 271 at Section 3.4 at paragraph 3).

Re Claim 27: Deshpande further discloses a substitution step of substituting, if the layer encoded data are stored in the storage means, the encoded data stored in the storage means with the plurality of independent encoded data segments obtained in the segmentation step (see pages 16-17 at Sections 2-4).

Re Claim 28: Deshpande further discloses the encoded data are processed for respective packets (see pages 16-17 at Sections 2-3).

Re Claim 29: Marcellin further discloses the dummy encoded data is zero length packet data specified by JPEG2000 (see page 271 at Section 3.4 at paragraphs 1-5).

Re Claim 30: Deshpande further discloses the segmentation step includes a step of segmenting the encoded data into a plurality of tiles, each tile having a predetermined size (see pages 16-17 at Sections 2-3).

Re Claim 31: Deshpande further discloses the client further comprises display means for displaying image data / display at a client, the fragmentary first encoded data is encoded data of the image data (see Fig. 1, abstract, page 16 at Section 2), and said method further comprises a setting step of setting the portion of the JPEG2000 encoded data designated by the user by at least one of moving and enlarging / zoom in out a display region of image data displayed on the display means (see page 16 at Section 2); a decoding step of decoding the encoded data output in the output step (see abstract); and a displaying step of displaying the decoded image data on a screen of the display means (see abstract).

Although Deshpande as modified by Marcellin, as recited in claim 32, fails to explicitly disclose the determination step, the dummy storage step, the substitution step, and the output step are parallelly processed for at least two segments of the plurality of independent encoded data segments obtained in the segmentation step, it would have been obvious to one of ordinary skill in the art at the time the invention was made to parallelly process in order to speed up the computation time (it is well known that parallel processing is faster than serial processing).

Re Claim 33 [as best understood by the Examiner]: As to claim 33, the claim is the corresponding system claim to claim 26 respectively. The discussions are addressed with regard to claim 26.

Re Claim 34: Deshpande further discloses the first / server computer and second computers / client computer can communicate with each other via a network / network (see Fig. 1).

Re Claim 35: As to claim 35, the claim is the corresponding computer readable medium claim to claim 26 respectively. The discussions are addressed with regard to claim 26.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Krasnic whose telephone number is (571) 270-1357. The examiner can normally be reached on Mon-Thur 8:00am-4:00pm and every other Friday 8:00am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jingge Wu/
Supervisory Patent Examiner, Art Unit 2624
Bernard Krasnic
January 3, 2009